

11/20/01
JC853 U.S. PTO

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PTO/SB/05 (4/98)

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Approved for use through 09/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL <small>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))</small>	Attorney Docket No.	044136.0004
	First Inventor or Application Identifier	Richard E. Funderburk et al
	Title	PRECISION REFERENCE GENERATION SYSTEM AND METHOD
	Express Mail Label No.	EL813905877US

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
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| <p>1. <input checked="" type="checkbox"/> *Fee Transmittal Form for FY 2001 (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)</p> <p>2. <input checked="" type="checkbox"/> Specification [Total Pages <u>14</u>]
(preferred arrangement set forth below)</p> <ul style="list-style-type: none">- Descriptive title of the Invention- Cross References to Related Applications- Statement Regarding Fed sponsored R & D- Reference to Microfiche Appendix- Background of the Invention- Brief Summary of the Invention- Brief Description of the Drawings (if filed)- Detailed Description- Claim(s)- Abstract of the Disclosure <p>3. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <u>5</u>]</p> <p>4. <input checked="" type="checkbox"/> Oath or Declaration [Total Pages <u>2</u>]</p> <p>a. <input checked="" type="checkbox"/> Newly executed (original or copy)</p> <p>b. <input type="checkbox"/> Copy from prior application (37 C.F.R. § 1.63(d))
(for continuation/divisional with Box 16 completed)</p> <p>i. <input type="checkbox"/> DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).</p> | <p>5. <input type="checkbox"/> Microfiche Computer Program (Appendix)</p> <p>6. Nucleotide and/or amino Acid Sequence Submission
(if applicable, all necessary)</p> <p>a. <input type="checkbox"/> Computer Readable Copy</p> <p>b. <input type="checkbox"/> Paper Copy (identical to computer copy)</p> <p>c. <input type="checkbox"/> Statement verifying identity of above copies</p> |
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*NOTE FOR ITEMS 1 & 13 IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION IS RELIED UPON (37 C.F.R. § 1.28).

ACCOMPANYING APPLICATION PARTS

7. ☐ Assignment Papers (cover sheet & document(s))
8. ☐ 37 C.F.R. §3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
9. ☐ English Translation Document (if applicable)
10. ☒ Information Disclosure Statement (IDS)/PTO-1449
- ☐ Copies of IDS Citations
11. ☐ Preliminary Amendment
12. ☐ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
13. ☐ *Small Entity Statement(s) (PTO/SB09-12)
- ☐ Statement filed in prior application, Status still proper and desired
14. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
15. ☒ Other: Remarks under 35 USC 1.53(b) (2 pg.); return postcard, check

16. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 09/092,452

Prior application information: Examiner R. Stevens

Group/Art Unit: 2662

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

17. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label 020790 or ☐ Correspondence address below

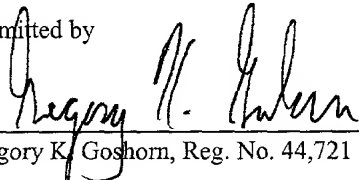
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City	State	Zip Code	
Country	Telephone	Fax	

Name (Print/type)	Gregory K. Goshorn	Registration No.	44,721
Signature	<i>Gregory K. Goshorn</i>	Date	November 20, 2001

FEE TRANSMITTAL for FY 2001 <i>Patent fees are subject to annual revision</i>		Complete if Known	
		Application Number	Not yet assigned
		Filing Date	Herewith
		First Named Inventor	Richard E. Funderburk et al.
		Examiner Name	Not yet assigned
		Group / Art Unit	Not yet assigned
Total Amount of Payment	\$ 740.00	Attorney Docket No.	044136.0004

METHOD OF PAYMENT (check one)						FEE CALCULATION (continued)																																																																																																																																																																																									
1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to: Deposit Account No.: <u>01-0660</u> Deposit Account Name: <u>Akin, Gump, Strauss, Hauer & Feld, L.L.P.</u> <input checked="" type="checkbox"/> Charge any additional Fee Required Under 37 CFR §§ 1.16 & 1.17 <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27						3. Additional Fees <table border="1"> <thead> <tr> <th>Late Fee Code</th> <th>Large Entity</th> <th>Small Fee Code</th> <th>Small Entity</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>\$ 130</td><td>205</td><td>\$ 65</td><td>Surcharge - late fee or oath</td><td>\$</td></tr> <tr><td>127</td><td>\$ 50</td><td>227</td><td>\$ 25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td>\$</td></tr> <tr><td>147</td><td>\$2,520</td><td>147</td><td>\$2,520</td><td>Request for Reexamination</td><td>\$</td></tr> <tr><td>112</td><td>\$920*</td><td>112</td><td>\$920*</td><td>Requesting publication of SIR prior to Examiner action</td><td>\$</td></tr> <tr><td>113</td><td>\$1840*</td><td>113</td><td>\$1840*</td><td>Requesting publication of SIR after Examiner action</td><td>\$</td></tr> <tr><td>115</td><td>\$ 110</td><td>215</td><td>\$ 55</td><td>Extension for reply within first month</td><td>\$</td></tr> <tr><td>116</td><td>\$ 390</td><td>216</td><td>\$ 195</td><td>Extension for reply within second month</td><td>\$</td></tr> <tr><td>117</td><td>\$ 890</td><td>217</td><td>\$ 445</td><td>Extension for reply within third month</td><td>\$</td></tr> <tr><td>118</td><td>\$1,390</td><td>218</td><td>\$ 695</td><td>Extension for reply within fourth month</td><td>\$</td></tr> <tr><td>128</td><td>\$1,890</td><td>228</td><td>\$ 945</td><td>Extension for reply within fifth month</td><td>\$</td></tr> <tr><td>119</td><td>\$ 310</td><td>219</td><td>\$ 155</td><td>Notice of Appeal</td><td>\$</td></tr> <tr><td>120</td><td>\$ 310</td><td>220</td><td>\$ 155</td><td>Filing a brief in support of an appeal</td><td>\$</td></tr> <tr><td>121</td><td>\$ 270</td><td>221</td><td>\$ 135</td><td>Request for oral hearing</td><td>\$</td></tr> <tr><td>140</td><td>\$ 110</td><td>240</td><td>\$ 55</td><td>Petition to revive - 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Submitted by

Date: Nov. 20, 2001

 Gregory K. Goshorn, Reg. No. 44,721

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicants:

RICHARD E. FUNDERBURK
CHRISTOPHER C. OTT

Filed: Herewith

Serial No.: Unknown

For: PRECISION REFERENCE
GENERATION SYSTEM AND
METHOD

Art Unit: 2662

Examiner: Unknown

Docket No.: 044136.0004

Box Patent Application
Commissioner for Patents
Washington, D.C. 20231

CONTINUATION FILED UNDER 35 U.S.C. §1.53(b)

Dear Sir:

This application is a continuation, filed under 35 U.S.C. §1.53(b) of pending U.S. Patent App. No. 09/092,452 ("the '452 Application"), which was filed on June 5, 1998. The '452 Application was the subject of a Notice of Allowability mailed on 09/12/2001. Consideration of the following remarks is respectfully requested.

REMARKS

In a Final Office Action dated May 29, 2001 in the '452 Application, the Examiner states the following:

Applicant argues that Bottomley does not teach or suggest either a 'processor coupled to the output of said receiver' or an 'oscillator coupled to the output of said processor.' These are not limitations recited in claim 1. ... Claim 1 does not specify where the connections are (input or output). Therefore Bottomley does stand in overcoming the limitations in claim 1 as clearly shown in figure 1.

(O.A. of 05/29/01, p. 4, line 19 through p. 5, line 5). Claims 1-9 in the current application clarify these limitations. The following remarks, originally from a response dated March 21, 2001 in the '452 Application, are thus relevant and are, for the sake of convenience, included here.

Claim 1 stands rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Bottomley et al. (U.S. Pat. No. 6,134,260) (hereinafter referred to as "Bottomley"). Briefly, Bottomley teaches "systems and methods for frequency acquisition and channel tracking in a direct sequence [CDMA] system" (Abstract). In other words, Bottomley is directed at a CDMA receiver that employs frequency control to produce a standard, decoded CDMA signal. The Applicants claimed subject matter is not primarily directed to controlling the frequency of a CDMA receiver to produce a standard, decoded CDMA signal, but rather to producing timing and control signals from a CDMA receiver. Bottomley's receiver feeds received frequency errors back into the tracking loop of his receiver to improve the frequency tracking of the receiver. Bottomley's receiver does not teach or suggest producing a "control signal and a timing signal" because all that Bottomley's receiver produces, as does any CDMA receiver, is a decoded, CDMA signal. Bottomley's receiver produces "soft bit values, which may be used in further processing, such as convolution decoding" (col. 4, lines 26-27) and which ultimately represent "speech, text or images" (col. 3, line 41). The communications system 105 of Figure 1 includes a radio processor 106, which "filters, amplifies, and mixes the signal down to baseband" (col. 3, line 36-37, and a baseband signal processor 110, which takes the baseband signal and produces estimates of symbol values" (col. 3, line 38-39). In other words, the apparatus of Bottomley produces "estimates of symbol values" (col. 3, line 39), not timing and control signals as does Applicants' claimed subject matter.

Bottomley does not teach or suggest either a "processor coupled to the output of said receiver" or an "oscillator coupled to the output of said processor." Bottomley is instead directed to a receiver that happens to include a processor and an oscillator, which are incorporated into the receiver to enhance the performance of the receiver, not coupled to the receiver in order to provide signals in addition to a standard, decoded CDMA signal. In Figure 2 of Bottomley, the radio processor 106 is incorporated in the receiver 200 and provides data samples for baseband processing (col. 3, line 67 through col. 4, line 1), not a control signal and a timing signal. The other elements of Figure 2, the code acquisition unit 202, the frequency acquisition unit 204, the OSC feedback unit 206, the frequency & channel tracking 208 and the coherent demodulator 210

apparently correspond to the baseband processor 110 of Figure 1. If the Office Action suggests that the receiver 200 teaches the Applicants' receiver, then there is nothing in Bottomley to suggest the Applicants' processor and oscillator. Although an OSC feedback unit 206 within the receiver 200 provides a corrective signal to the radio processor 106, this corrective signal merely corrects the tracking of the receiver 200 and is not a signal that is "produced by the processor." In addition, the receiver 200 does not produce this corrective signal "based upon a control signal" from the radio processor 106.

Given that the subject matter as claimed by the Applicant in claim 1 explicitly contains limitations and elements neither taught nor suggested by Bottomley, the Applicant respectfully requests withdrawal of the 35 U.S.C. § 102(e) rejection, as it is not supported by the cited reference.

Claims 2-5 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bottomley. Claims 2-5 are at least allowable as being dependant upon an allowable independent claim 1. Claims 2-5, being further limitations upon an independent, allowable base claim 1, are allowable.

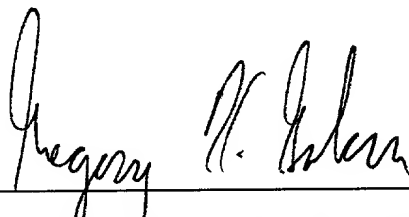
Claims 6-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bottomley in view of Okamura et al. (U.S. Pat. No. 6,014,285) (hereinafter referred to as "Okamura"). Claims 6-9 are at least allowable as being dependant upon an allowable independent claim 1. Further, as explained above, Applicants' claimed subject matter is not primarily directed to the control of the CDMA receiver. In addition, Okamura is directed to the control of a mechanical disk drive, an art that is certainly not analogous to generating timing and control signals from a CDMA receiver. In fact, the only references to frequency in Okamura are related to the characteristics of a notch filter. Finally, there is no motivation in either Bottomley or Okamura to combine the two references. One with skill in the art of CDMA receivers would not necessarily be familiar with prior art in the field of mechanical, disk drives and their control. Therefore, the Applicant submits that the inclusion of Bottomley with Okamura does not support a proper 35 U.S.C. § 103(a) rejection of claims 6-8 and Applicants request withdrawal of these rejections as well.

CONCLUSION

Applicants believe that claims 1-9 are allowable and a Notice of Allowance is courteously solicited. If there is any impediment to the allowance of these claims, and such impediment could be alleviated during a telephone interview, the Examiner is invited to telephone the undersigned so that such issues may be resolved as expeditiously as possible.

No fees are believed to be due with regard to this Response. However, if any fees are deemed necessary, the Commissioner is authorized to charge said fees, or to credit any overpayments, to Akin, Gump, Strauss, Hauer & Feld, L.L.P., Deposit Account No. 01-0660 (044136.0004/GKG).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gregory K. Goshorn", written over a horizontal line.

Date: November 20, 2001

Gregory K. Goshorn, Reg. No. 44,721
Akin, Gump, Strauss, Hauer & Feld, L.L.P.
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Austin, Texas 78701
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